

# LEARNER ORIENTED CO-OPERATIVE LEARNING: A BOOSTER TO HIGHER EDUCATIONAL LEARNERS

By

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### ABSTRACT

*The present study enlightens the impact of Learner-Oriented-Co-operative Learning in enriching knowledge in Environmental Education at Higher Education. To achieve the expected competency in Biodiversity, various approaches were adopted in the class room transaction which were not fruitful. Hence the researcher practiced the Learner Oriented-Co operative Learning in the classroom transaction. Single group Experimental method was adopted in the study. Qualitative and quantitative approaches were adopted in the study. Twenty five students studying in Master of Commerce at Bharathiar University, Coimbatore, Tamilnadu were considered as sample for the study. Achievement test was considered as tool for the study. Resarcher's self-made tool was used for pretest and post test. After administering pre test, treatment was given through Learner-Oriented-Co-operative Learning to find out the effectiveness of it. Descriptive statistics was applied for the study. Learner-oriented-Cooperative Learning was found to be more effective than traditional method in Learning Biodiversity in Environmental Education. The fruitful method can be implemented in other Universities and colleges for other subjects also.*

### INTRODUCTION

Environmental Education has unique place to control the global warming which is to be adopted in higher Education to ensure the conservation of the nature. It should be strengthened in all levels of students in colleges and Universities. Even though we are living and consuming scientific advancement, mankind should be saved from natural calamities which are believed to be created due to scientific applications in our day-to-day life. Better understanding of the conservation of the biodiversity is an immediate need of the world, which can be easily rooted in the minds of the students through Environmental Education, that is considered as a supportive paper in Bharathiar University for the postgraduate students. The paper consists of historical aspects of environmental Education, essentials of creating awareness on conserving the biodiversity, causes of failure of saving the biodiversity, adopting different methods, steps to be adopted to enhance the knowledge in protecting the nature, existing problems due to urbanization and modernization and elucidating different strategies in teaching learning process in the class room transactions. It may activate the future generation to extend their activities to preserve the nature for better future. Applying various effective strategies in

teaching Environmental Education is not fruitful at university level. Hence the researcher finds out an innovative strategy named Learner-Oriented -Co-operative Learning to enrich the knowledge in Environmental Education.

### Significance of the study

Different methods were used in the classroom transaction of teaching Environmental Education, which were not opted to practice in the society and the learners failed to achieve expected competency in it. Postgraduate students of commerce studying in the department of commerce in Bharathiar University, Coimbatore faced problems in learning Environmental Education. To achieve the expected competency, researcher had to find out innovative strategies for the fruitful success in the learning of Environmental Education. Learner Oriented Co-operative Learning became a suitable strategy to practice in the classroom transactions, which was practiced for easy scoring of marks as well as for the implementations in their surroundings and creating awareness in the society.

### Operational Definitions

*Environmental Education refers to the study of conserving bio-diversity*

Learner-Oriented Co-operative Learning refers to Group learning of the students centered around them. Learner - Oriented is student dependent in learning. In the approach, students can be divided into different groups according to their wish and each group learns in their own pace which promotes the learning in expected manner. Teacher is a facilitator in the learning transactions.

## Objectives of the study

- To identify the existing problems in learning Environmental Education of the students of M. Com studying in Bharathiar University, Coimbatore.
- To find out the significant difference in achievement mean scores between Traditional strategy and Learner-Oriented Co-operative Learning strategy in learning Environmental Education.
- To assess the effectiveness of the Learner-Oriented Co-operative Learning in learning Environmental Education.

## Hypotheses of the study

- 1) Students of M. com studying in Bharathiar University, Coimbatore had problems in learning Environmental Education.
- 2) There is no significant difference in mean achievement score between traditional Strategy and Learner-Oriented Co-operative Learning strategy in learning Environmental Education.
- 3) Learner-Oriented Co-operative Learning strategy is more effective than traditional strategy in learning Environmental Education.

## Delimitations

- Students of M.com studying in Bharathiar University, Coimbatore were only taken for the study.
- Students learning Environmental Education as a supportive paper alone were taken for the study.
- Syllabus of Bharathiar University was adopted for the study.

## Methodology

Single group experimental method was adopted for the study (pre-test and post-test to the same group). Twenty five students were taken for the study. First, traditional

methods of teaching Environmental Education to the learners were given and their performance was tested by administering Pre-test (achievement test) and the scores were tabulated. Secondly, the same 25 students were considered for the treatment of using innovative strategy in teaching through Learner-Oriented Co-operative Learning strategy for learning Environmental Education. The same tool was not used for the Post-test, but the items of the tool on the basis of blue print were prepared and administered as post-test for analysing the study. Equal weightage was maintained in both tools.

- Teaching through Traditional Strategy
- Administering Pre-test
- Teaching through Learner-Oriented Co-operative Learning strategy.
- Administering Post-test (the same group): The tool used was not the same as in the pre-test.

## Sample

Twenty five students of M. com studying in Bharathiar University, Coimbatore were taken for the study.

## Tool

Researcher self-made tools and achievement tests were used for the study. Pilot studies were administered for establishing validity and reliability of the tools for the pre-test as well as post-test. After establishing validity and reliability of the tools, both the tests were administered.

## Statistical technique

t-test was used to analyze the study.

## Procedure of the study

- Identifying the learning impediments of the students of M. Com in learning Environmental Education through traditional strategy.
- Preparation of tool.
- Administering pre-test.
- Providing treatment by using Learner-Oriented Co-operative Learning strategy in learning Environmental Education.
- Administering post-test to the same group.

## Activities in learner-oriented co-operative learning strategy

- Learners decided the activities with help of the lecturer. eg. workshop, discussion etc.
- Inquiry based learning among the students.
- Team teaching arrangements among the students.
- Term defining techniques.
- Picture oriented activities.

## Data analysis and interpretation

### Hypothesis Testing-1

Students of M. com studying in Bharathiar University, Coimbatore had problems in learning Environmental Education.

Table 1 shows the achievement scores in percentage between pre-tests of conventional learning (20) and post-test after treatment given through Learner-Oriented Co-operative Learning (46). Scoring marks in pre-tests in the group confirm the existing problems of the students of M. com in learning Environmental Education in Bharathiar University, Coimbatore.

### Hypothesis Testing-2

There is no significant difference in mean achievement score between traditional strategy and Learner-Oriented Co-operative Learning strategy in learning Environmental Education.

The calculated value as shown in Table 2 is (8.61) which is greater than table value (2.68). Hence null hypothesis is rejected at 0.01 level. It shows that there is significant difference between Traditional strategy and Learner-Oriented Co-operative Learning strategy in learning Environmental Education.

| Strategies                             | Involved students in the study | Percentage of scores in both tests |
|--|--------------------------------|------------------------------------|
| Conventional                           | 25                             | 20 pre-test                        |
| Learner-Oriented Co-operative Learning | 25                             | 46 post - test                     |

Table 1. Difference between pre-test and post-test

| Groups                                 | Mean  | S.D  | t    | df   | Level of significance |
|--|-------|------|------|------|-----------------------|
| Conventional                           | 4.84  | 1.72 | 8.61 | 2.68 | P<0.01 significant    |
| Learner-Oriented Co-operative Learning | 10.96 | 2.07 |      |      |                       |

Table 2. Significant difference mean scores of pre-test and post-test

| Strategies  | tests scores in percentage | tests of mean scores |
|---|----------------------------|----------------------|
| Traditional (pretest)                             | 20                         | 1.72                 |
| Learner-Oriented Co-operative Learning (posttest) | 46                         | 2.07                 |

Table 3. Difference between the score of pre-test and post-test

### Hypothesis Testing-3

Learner-Oriented Co-operative Learning strategy is more effective than traditional strategy in learning Environmental Education.

Table 3 indicates the effectiveness of Learner-Oriented Co-operative Learning strategy in learning Environmental Education. High score in using Learner-Oriented Co-operative Learning strategy is 46% and mean is 2.07. High score using traditional strategy is 20% and mean is 1.72 which shows the effectiveness of Learner-Oriented Co-operative Learning strategy in learning Environmental Education, over traditional strategy.

### Findings

- Table 3 shows the achievement scores in percentage between pre-tests of conventional learning (20%) and post-test after treatment given through Learner-Oriented Co-operative Learning (46%). Scoring marks in pre-tests in the group confirm the existing problems of the students of M. com in learning Environmental Education in Bharathiar University, Coimbatore.
- The calculated value is (8.61) greater than table value (2.68). Hence null hypothesis is rejected at 0.01 level. It shows that there is significant difference between Traditional strategy and Learner-Oriented Co-operative Learning strategy in learning Environmental Education.
- High score in using Learner-Oriented Co-operative Learning strategy is 46% and mean is 2.07. High score using traditional strategy is 20% and mean is 1.72. It shows the effectiveness of Learner-Oriented Co-operative Learning strategy in learning Environmental Education.

### Conclusion

With the evident of the results obtained from the study, the researcher suggested that Learner-oriented-co-operative Learning is a successful method that can be

adopted in higher education for more understanding of the subject matter. The study can be extended to those who are studying the subject in other colleges and universities as well as other states. This approach can be

applied not only for environmental education but to other subjects also. It may be useful to implement to college of Education.

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### ABOUT THE AUTHOR

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*Dr. G. Singaravelu is specialized in primary education. He got NCERT award for his innovative gadgets used in mathematics and trained more than two thousand teachers in Activity Based Learning.*

